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42-045-00070

**Monroe Energy, LLC**  
Trainer Refinery  
4101 Post Road  
Trainer, PA 19061  
(610) 364-8000

July 7, 2016

Mr. James Rebarchak  
Regional Manager - Air Quality  
Commonwealth of Pennsylvania  
Pennsylvania Department of Environmental Protection  
2 East Main St.  
Norristown, PA 19401

**RECEIVED**

JUL 14 2016

Air Protection Division

**RE: MONROE ENERGY TRAINER REFINERY 2016 SEMI ANNUAL LDAR REPORTS**

Dear Mr. Rebarchak:

As required by Title 40, Part 60 Monroe Energy Trainer Refinery hereby submits the following Semi-Annual LDAR Reports for the time period January 1, 2016 to June 30, 2016

1. NSPS LDAR Report, per 40 CFR §60.480, Subpart VV:

- Compliance Monitoring Summary
- Compliance Repair Delay List
- Repair Delayed History – Components Repaired During Reporting Period
- Summary of Components Added and Deleted During Reporting Period

2. REFINERY MACT LDAR Report, per 40 CFR Part 63, Subpart CC:

- Compliance Monitoring Summary
- Compliance Repair Delay List
- Repair Delayed History – Components Repaired During Reporting Period.
- Summary of Components Added and Deleted During Reporting Period.

3. GGGa LDAR Report, per 40 CFR §60.590a, Subpart GGGa:

- Compliance Monitoring Summary
- Compliance Repair Delay List
- Repair Delayed History – Components Repaired During Reporting Period.

- Summary of Components Added and Deleted During Reporting Period.

As required by the Consent Decree H-05-0258, paragraph 236, Monroe Energy is hereby notifying you that the report leak rates contained herein for valves and pumps are those applicable regulatory leak definitions in Title 40 CFR, 60.482. In addition to the aforementioned Consent Decree, all valves with a leak rate of over 10,000 ppm that required a Drill and Tap were successfully repaired to a leak rate less than 500 ppm and were not placed on Delay of Repair list.

Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009 (b) (2), I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this form are true, accurate, and complete.

Should you have any questions or comments regarding this report, please contact Stephani Ski Szymanski, Environmental Engineer and Program Lead, at (610) 364-8073.

Sincerely,



Jeffrey K. Warmann  
CEO and President

Enclosures (1)

Cc: Ms. Zelma Maldonado  
Associate Director,  
Office of Air Enforcement,  
Compliance and Assistance  
USEPA Region III  
Air Protection Division  
3AP20  
1650 Arch Street  
Philadelphia, Pa 19103-1129

MONROE ENERGY TRAINER REFINERY  
GGGa SEMI ANNUAL LDAR REPORT  
SUMMARY REPORT  
REPORT DATE: JULY 7, 2016  
REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

<u>Regulation</u>	<u>ComplianceGroup</u>	<u>Class</u>	<u>Month</u>	<u>Monitored</u>	<u>Leaked</u>	<u>Late Repair</u>
<u>GGGa</u>	<u>543 CRUDE</u>					
		PUMP	1	4	0	0
		PUMP	2	4	0	0
		PUMP	3	4	0	0
		PUMP	4	4	0	0
		PUMP	5	4	0	0
		PUMP	6	4	0	0
		RELIEF	2	8	0	0
		RELIEF	5	8	0	0
		RELIEF	6	22	0	0
		VALVE	1	6	0	0
		VALVE	2	1,071	0	0
		VALVE	5	1,079	5	0
		VALVE	6	21	0	0
				<u>2,239</u>	<u>5</u>	<u>0</u>
<u>GGGa</u>	<u>544 CRUDE</u>					
		PUMP	1	15	0	0
		PUMP	2	15	0	0
		PUMP	3	15	0	0
		PUMP	4	15	0	0
		PUMP	5	15	0	0
		PUMP	6	15	0	0
		RELIEF	2	8	0	0
		RELIEF	5	8	0	0
		RELIEF	6	10	0	0
		VALVE	1	11	0	0
		VALVE	2	1,170	10	0
		VALVE	3	13	0	0
		VALVE	4	15	1	0
		VALVE	5	1,180	3	0
		VALVE	6	19	0	0
				<u>2,524</u>	<u>14</u>	<u>0</u>
<u>GGGa</u>	<u>544 VACUUM</u>					
		PUMP	1	2	0	0
		PUMP	2	2	0	0
		PUMP	3	2	0	0
		PUMP	4	2	0	0
		PUMP	5	2	0	0

PUMP	6	2	0	0
RELIEF	1	1	1	0
RELIEF	2	7	0	0
RELIEF	3	1	0	0
RELIEF	4	2	0	0
RELIEF	5	7	0	0
RELIEF	6	9	0	0
VALVE	1	1	0	0
VALVE	2	392	0	0
VALVE	5	392	0	0
VALVE	6	5	0	0

829      1      0

GGGa      BOILER 14

VALVE	6	49	1	0
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49      1      0

GGGa      BOILERS 9 & 10

RELIEF	3	4	0	0
RELIEF	6	4	0	0
VALVE	1	2	0	0
VALVE	2	431	1	0
VALVE	3	431	0	0
VALVE	4	1	0	0
VALVE	5	1	0	0
VALVE	6	435	0	0

1,309      1      0

GGGa      FLARE GAS RECOVERY

PUMP	1	6	0	0
PUMP	2	7	0	0
PUMP	3	7	0	0
PUMP	4	7	0	0
PUMP	5	7	0	0
PUMP	6	7	0	0
RELIEF	1	20	0	0
RELIEF	6	20	0	0
VALVE	1	1,043	0	0
VALVE	2	10	0	0
VALVE	3	1,053	1	0
VALVE	4	2	0	0
VALVE	5	2	0	0
VALVE	6	1,054	1	0

3,245      2      0

GGGa      VGO

PUMP	1	1	0	0
PUMP	2	1	0	0
PUMP	3	1	0	0
PUMP	4	1	0	0
PUMP	5	1	0	0
PUMP	6	1	0	0
RELIEF	1	11	0	0
RELIEF	4	11	0	0
VALVE	1	620	4	0
VALVE	2	4	0	0
VALVE	3	4	0	0
VALVE	4	618	1	0
VALVE	5	2	0	0
VALVE	6	3	0	0
		<u>1,279</u>	<u>5</u>	<u>0</u>
<b>Grand Total:</b>		<u><u>11,474</u></u>	<u><u>29</u></u>	<u><u>0</u></u>

MONROE ENERGY TRAINER REPORT  
GGGa SEMI ANNUAL LDAR REPORT  
COMPONENTS ON DELAY OF REPAIR  
REPORT DATE: JULY 7, 2016  
REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

TAG	UNIT	CLASS	DATE PLACED ON DELAY
8029	544 VACUUM	RELIEF	1/14/2016
13510	BOILERS 9&10	VALVE	2/24/2016
5507	VGO	VALVE	2/4/2016
TOTAL:			3

MONROE ENERGY TRAINER REPORT

GGGa SEMI ANNUAL LDAR REPORT

OFF REPAIR OF DELAY

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

TAG	UNIT	ON DELAY	OFF DELAY
8029	544 VACUUM	1/14/2016	4/26/2016
5507	VGO	2/4/2016	4/5/2016
		TOTAL:	2

## MONROE ENERGY TRAINER REPORT

GGGa SEMI ANNUAL LDAR REPORT

ADDED AND DELETED

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

UNIT	CLASS	ADDED	DELETED
543 CRUDE	PRESSURE RELIEF DEVICE	0	0
543 CRUDE	PUMP	0	0
543 CRUDE	VALVE	8	0
544 CRUDE	PRESSURE RELIEF DEVICE	0	0
544 CRUDE	PUMP	0	0
544 CRUDE	VALVE	16	10
544 VACUUM	PRESSURE RELIEF DEVICE	1	1
544 VACUUM	PUMP	0	0
544 VACUUM	VALVE	2	0
BOILER 14	VALVE	48	0
BOILERS 9 & 10	PRESSURE RELIEF DEVICE	0	0
BOILERS 9 & 10	VALVE	4	0
FLARE GAS RECOVERY	COMPRESSOR	0	0
FLARE GAS RECOVERY	PRESSURE RELIEF DEVICE	0	0
FLARE GAS RECOVERY	PUMP	1	0
FLARE GAS RECOVERY	VALVE	11	0
VGO	COMPRESSOR	0	0
VGO	PRESSURE RELIEF DEVICE	0	0
VGO	PUMP	0	0
VGO	VALVE	0	1
TOTAL		91	12



MONROE ENERGY TRAINER REFINERY  
 NSPS EPAVV LDAR SEMI ANNUAL REPORT  
 SUMMARY

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 - JUNE 30, 2016

<u>REGULATION</u>	<u>UNIT</u>	<u>CLASS</u>	<u>MONTH</u>	<u>MONITORED</u>	<u>LEAKED</u>	<u>LATE REPAIR</u>
<u>EPAVV</u>	<u>543 CRUDE</u>					
		PUMP	1	4	0	0
		PUMP	2	4	0	0
		PUMP	3	4	0	0
		PUMP	4	4	0	0
		PUMP	5	4	0	0
		PUMP	6	4	0	0
		RELIEF	2	8	0	0
		RELIEF	5	8	0	0
		RELIEF	6	22	0	0
		VALVE	1	6	0	0
		VALVE	2	1,071	0	0
		VALVE	5	1,079	0	0
		VALVE	6	21	0	0
				<u>2,239</u>	<u>0</u>	<u>0</u>
<u>EPAVV</u>	<u>544 CRUDE</u>					
		PUMP	1	15	0	0
		PUMP	2	15	0	0
		PUMP	3	15	0	0

PUMP	4	15	0	0
PUMP	5	15	0	0
PUMP	6	15	0	0
RELIEF	2	8	0	0
RELIEF	5	8	0	0
RELIEF	6	10	0	0
VALVE	1	11	0	0
VALVE	2	1,170	2	0
VALVE	3	13	0	0
VALVE	4	15	0	0
VALVE	5	1,180	0	0
VALVE	6	19	0	0
		<u>2,524</u>	<u>2</u>	<u>0</u>

EPAVV      544 VACUUM

PUMP	1	2	0	0
PUMP	2	2	0	0
PUMP	3	2	0	0
PUMP	4	2	0	0
PUMP	5	2	0	0
PUMP	6	2	0	0
RELIEF	1	1	1	0 DOR
RELIEF	2	7	0	0

RELIEF	3	1	0	0
RELIEF	4	2	0	0
RELIEF	5	7	0	0
RELIEF	6	9	0	0
VALVE	1	1	0	0
VALVE	2	392	0	0
VALVE	5	392	0	0
VALVE	6	5	0	0
		<u>829</u>	<u>1</u>	<u>0</u>

EPAVV

ALKY

PUMP	1	28	0	0
PUMP	2	28	0	0
PUMP	3	28	0	0
PUMP	4	28	0	0
PUMP	5	28	0	0
PUMP	6	28	0	0
RELIEF	2	38	0	0
RELIEF	5	38	0	0
RELIEF	6	9	0	0
VALVE	1	12	0	0
VALVE	2	3,405	5	0
VALVE	3	79	0	0
VALVE	4	5	0	0

		VALVE	5	3,404	2	0
		VALVE	6	25	0	0
				<u>7,183</u>	<u>7</u>	<u>0</u>
<u>EPAVV</u>	<u>AMINE</u>					
		PUMP	1	1	0	0
		PUMP	2	2	0	0
		PUMP	3	2	0	0
		PUMP	4	2	0	0
		PUMP	5	2	0	0
		PUMP	6	2	0	0
		RELIEF	1	6	0	0
		RELIEF	4	6	0	0
		VALVE	1	349	0	0
		VALVE	2	8	0	0
		VALVE	3	8	0	0
		VALVE	4	357	0	0
				<u>745</u>	<u>0</u>	<u>0</u>
<u>EPAVV</u>	<u>AWWTP</u>					
		VALVE	1	140	0	0
		VALVE	4	140	0	0
				<u>280</u>	<u>0</u>	<u>0</u>
<u>EPAVV</u>	<u>BLEND</u>					
		PUMP	1	16	0	0

PUMP	2	16	0	0
PUMP	3	16	0	0
PUMP	4	16	0	0
PUMP	5	16	0	0
PUMP	6	16	0	0
RELIEF	1	16	0	0
RELIEF	4	16	0	0
RELIEF	6	18	0	0
VALVE	1	1,261	0	0
VALVE	4	1,261	0	0
VALVE	5	1	0	0
		<u>2,669</u>	<u>0</u>	<u>0</u>

EPAVV

BOILER

RELIEF	2	1	0	0
RELIEF	3	1	0	0
RELIEF	6	1	0	0
VALVE	2	78	0	0
VALVE	3	78	0	0
VALVE	6	78	0	0
		<u>237</u>	<u>0</u>	<u>0</u>

EPAVV

BUTANE

RELIEF	2	7	0	0
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	RELIEF	5	7	0	0
	RELIEF	6	2	0	0
	VALVE	2	298	1	0
	VALVE	3	1	0	0
	VALVE	4	1	0	0
	VALVE	5	298	0	0
			<u>614</u>	<u>1</u>	<u>0</u>

EPAVV

DESALT

.

	PUMP	1	10	0	0
	PUMP	2	10	0	0
	PUMP	3	10	0	0
	PUMP	4	10	0	0
	PUMP	5	10	0	0
	PUMP	6	10	0	0
	RELIEF	1	12	0	0
	RELIEF	4	12	0	0
	RELIEF	6	9	0	0
	VALVE	1	815	0	0
	VALVE	2	2	0	0
	VALVE	4	811	0	0
	VALVE	6	8	0	0
			<u>1,729</u>	<u>0</u>	<u>0</u>

EPAVV

DIESEL

PUMP	1	11	0	0
PUMP	2	11	0	0
PUMP	3	11	0	0
PUMP	4	11	0	0
PUMP	5	11	0	0
PUMP	6	11	0	0
RELIEF	1	9	0	0
RELIEF	4	9	0	0
RELIEF	6	7	0	0
VALVE	1	792	1	0
VALVE	2	1	0	0
VALVE	3	1	0	0
VALVE	4	792	0	0
VALVE	6	6	0	0
		<u>1,683</u>	<u>1</u>	<u>0</u>

EPAVV

FCC

PUMP	1	19	0	0
PUMP	2	23	0	0
PUMP	3	23	0	0
PUMP	4	25	0	0
PUMP	5	25	0	0
PUMP	6	25	0	0
RELIEF	2	25	0	0

RELIEF	3	2	0	0
RELIEF	5	33	0	0
RELIEF	6	8	0	0
VALVE	2	1,965	1	0
VALVE	3	111	0	0
VALVE	4	434	0	0
VALVE	5	2,283	0	0
VALVE	6	13	0	0
		<u>5,014</u>	<u>1</u>	<u>0</u>

EPAVV

FLARE

PUMP	1	3	0	0
PUMP	2	3	0	0
PUMP	3	3	0	0
PUMP	4	3	0	0
PUMP	5	3	0	0
PUMP	6	3	0	0
VALVE	1	3	0	0
VALVE	3	221	0	0
VALVE	6	221	0	0
		<u>463</u>	<u>0</u>	<u>0</u>

EPAVV

ISOCRK

COMPR	1	1	0	0
COMPR	2	1	0	0



COMPR	3	1	0	0
COMPR	4	1	0	0
COMPR	5	1	0	0
COMPR	6	1	0	0
CONECT	1	1	0	0
CONECT	3	1	1	0
PUMP	1	18	0	0
PUMP	2	18	0	0
PUMP	3	18	0	0
PUMP	4	18	0	0
PUMP	5	18	0	0
PUMP	6	18	0	0
RELIEF	1	57	1	0
RELIEF	2	2	0	0
RELIEF	3	1	0	0
RELIEF	4	56	0	0
RELIEF	6	4	0	0
VALVE	1	3,112	2	0
VALVE	2	13	0	0
VALVE	3	17	0	0
VALVE	4	3,119	1	0
VALVE	5	6	0	0

<u>EPAVV</u>	<u>KERO</u>	VALVE	6	10	0	0
				<u>6,513</u>	<u>5</u>	<u>0</u>
		PUMP	1	9	0	0
		PUMP	2	9	0	0
		PUMP	3	9	0	0
		PUMP	4	9	0	0
		PUMP	5	9	0	0
		PUMP	6	9	0	0
		RELIEF	1	31	0	0
		RELIEF	4	30	0	0
<u>EPAVV</u>	<u>LOWLN</u>	RELIEF	6	8	0	0
		VALVE	1	1,520	0	0
		VALVE	4	1,520	0	0
		VALVE	5	1	0	0
		VALVE	6	22	0	0
				<u>3,186</u>	<u>0</u>	<u>0</u>
		PUMP	1	6	0	0
		PUMP	2	6	0	0
		PUMP	3	6	0	0
		PUMP	4	6	0	0
		PUMP	5	6	0	0

	PUMP	6	6	0	0
	RELIEF	1	6	0	0
	RELIEF	4	6	0	0
	VALVE	1	577	0	0
	VALVE	4	574	0	0
	VALVE	6	2	0	0
			<u>1,201</u>	<u>0</u>	<u>0</u>

EPAVV      MARINE

	RELIEF	2	8	0	0
	RELIEF	5	8	0	0
	RELIEF	6	1	0	0
	VALVE	2	185	0	0
	VALVE	5	179	0	0
	VALVE	6	29	0	0
			<u>410</u>	<u>0</u>	<u>0</u>

EPAVV      NAPHTH

	PUMP	1	16	0	0
	PUMP	2	16	0	0
	PUMP	3	16	0	0
	PUMP	4	16	0	0
	PUMP	5	16	0	0
	PUMP	6	16	0	0
	RELIEF	3	13	0	0

EPAVV

PLATFO

RELIEF	6	20	0	0
VALVE	1	2	0	0
VALVE	2	2	0	0
VALVE	3	1,506	3	0
VALVE	4	4	0	0
VALVE	5	4	0	0
VALVE	6	1,517	0	0
		<u>3,164</u>	<u>3</u>	<u>0</u>
COMPR	1	1	0	0
COMPR	2	1	0	0
COMPR	3	1	0	0
COMPR	4	1	0	0
COMPR	5	1	0	0
COMPR	6	1	0	0
CONECT	1	1	0	0
CONECT	2	1	0	0
CONECT	3	1	0	0
PUMP	1	10	0	0
PUMP	2	10	0	0
PUMP	3	10	0	0
PUMP	4	10	0	0
PUMP	5	10	0	0

PUMP	6	10	0	0
RELIEF	3	30	0	0
RELIEF	6	30	0	0
VALVE	1	5	0	0
VALVE	2	5	0	0
VALVE	3	2,196	0	0
VALVE	4	11	0	0
VALVE	5	10	0	0
VALVE	6	2,197	0	0
		<u>4,553</u>	<u>0</u>	<u>0</u>

EPAVV

PRORCL

PUMP	1	1	0	0
PUMP	2	1	0	0
PUMP	3	1	0	0
PUMP	4	1	0	0
PUMP	5	1	0	0
PUMP	6	1	0	0
RELIEF	3	3	0	0
RELIEF	6	3	0	0
VALVE	1	1	0	0
VALVE	2	1	0	0
VALVE	3	313	2	0

	VALVE	4	2	0	0
	VALVE	5	2	0	0
	VALVE	6	313	0	0
			<u>644</u>	<u>2</u>	<u>0</u>

EPAVV      PROREC

	RELIEF	2	12	0	0
	RELIEF	5	12	0	0
	RELIEF	6	1	0	0
	VALVE	2	644	1	0
	VALVE	3	1	0	0
	VALVE	4	1	0	0
	VALVE	5	644	4	0
	VALVE	6	4	0	0
			<u>1,319</u>	<u>5</u>	<u>0</u>

EPAVV      PROSTO

	PUMP	1	6	0	0
	PUMP	2	6	0	0
	PUMP	3	6	0	0
	PUMP	4	6	0	0
	PUMP	5	6	0	0
	PUMP	6	6	0	0
	RELIEF	1	21	0	0
	RELIEF	4	20	0	0

RELIEF	6	1	0	0
VALVE	1	540	1	0
VALVE	2	2	0	0
VALVE	3	1	0	0
VALVE	4	539	0	0
		<u>1,160</u>	<u>1</u>	<u>0</u>

EPAVV

REFORM

PUMP	1	8	0	0
PUMP	2	8	0	0
PUMP	3	8	0	0
PUMP	4	8	0	0
PUMP	5	8	0	0
PUMP	6	8	0	0
RELIEF	2	11	0	0
RELIEF	5	11	0	0
RELIEF	6	3	0	0
VALVE	2	825	0	0
VALVE	5	825	0	0
VALVE	6	6	0	0
		<u>1,729</u>	<u>0</u>	<u>0</u>

EPAVV

SOUR

RELIEF	2	2	0	0
RELIEF	5	2	0	0

VALVE	2	53	0	0
VALVE	5	53	0	0
		<u>110</u>	<u>0</u>	<u>0</u>

EPAVV

SOUTH TANK FARM

PUMP	1	28	0	0
PUMP	2	29	0	0
PUMP	3	29	0	0
PUMP	4	29	0	0
PUMP	5	29	0	0
PUMP	6	29	0	0
RELIEF	3	100	0	0
RELIEF	5	1	0	0
RELIEF	6	36	0	0
VALVE	1	3	0	0
VALVE	2	5	0	0
VALVE	3	2,635	0	0
VALVE	4	26	0	0
VALVE	5	2	0	0
VALVE	6	2,574	1	0
		<u>5,555</u>	<u>1</u>	<u>0</u>

EPAVV

SRU

RELIEF	1	3	0	0
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	RELIEF	4	3	0	0
	VALVE	1	78	0	0
	VALVE	2	2	0	0
	VALVE	4	78	0	0
			<u>164</u>	<u>0</u>	<u>0</u>

EPAVV      TAIL GAS

	RELIEF	1	3	0	0
	RELIEF	4	3	0	0
	VALVE	1	159	0	0
	VALVE	4	159	0	0
			<u>324</u>	<u>0</u>	<u>0</u>

EPAVV      TF

	PUMP	1	10	0	0
	PUMP	2	10	0	0
	PUMP	3	10	0	0
	PUMP	4	10	0	0
	PUMP	5	10	0	0
	PUMP	6	10	0	0
	RELIEF	1	1	0	0
	RELIEF	4	1	0	0
	VALVE	3	889	0	0
	VALVE	6	872	0	0
			<u>1,823</u>	<u>0</u>	<u>0</u>

EPAVVVACUUM

PUMP	1	2	0	0
PUMP	2	2	0	0
PUMP	3	2	0	0
PUMP	4	2	0	0
PUMP	5	2	0	0
PUMP	6	2	0	0
RELIEF	1	3	0	0
RELIEF	4	3	0	0
VALVE	1	494	1	0
VALVE	2	2	0	0
VALVE	3	1	0	0
VALVE	4	494	0	0
VALVE	6	1	0	0
		<u>1,010</u>	<u>1</u>	<u>0</u>

EPAVVVGO

CONECT	1	3	0	0
PUMP	1	1	0	0
PUMP	2	1	0	0
PUMP	3	1	0	0
PUMP	4	1	0	0
PUMP	5	1	0	0
PUMP	6	1	0	0

RELIEF	1	11	0	0
RELIEF	4	11	0	0
VALVE	1	620	0	0
VALVE	2	4	0	0
VALVE	3	4	0	0
VALVE	4	618	1	0
VALVE	5	2	0	0
VALVE	6	3	0	0
		<u>1,282</u>	<u>1</u>	<u>0</u>

EPAVV

WGS

PUMP	1	4	0	0
VALVE	1	1	0	0
		<u>5</u>	<u>0</u>	<u>0</u>

Grand Total:

60,361      32      0

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MONROE ENERGY TRAINER REFINERY  
 NSPS EPAV LDAR SEMI ANNUAL REPORT  
 ON DELAY OF REPAIR  
 REPORT DATE: JULY 7, 2016  
 REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

TAG	UNIT	CLASS	ON DELAY
8029	544 VACUUM	RELIEF	1/14/2016
16169	ISOCRK	RELIEF	1/26/2016
TOTAL:			2

MONROE ENERGY TRAINER REFINERY  
 NSPS EPAVV LDAR SEMI ANNUAL REPORT  
 OFF DELAY OF REPAIR  
 REPORT DATE: JULY 7, 2016  
 REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

TAG	AREA	COMPONENT	OFF DELAY
8029	544 VACUUM TOWER	RELIEF	4/26/2016
16169	ISOCRK	RELIEF	3/2/2016
11066A	PLATFORMER	CONNECTOR	3/2/2016
TOTAL:			3

## MONROE ENERGY TRAINER REFINERY

## NSPS EPAWLDAR SEMI ANNUAL REPORT

## ADDED AND DELETED

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 THROUGH DECEMBER 31, 2016

UNTI	CLASS	ADDED	DELETE
543 CRUDE	PRESSURE RELIEF DEVICE	0	0
543 CRUDE	PUMP	0	0
543 CRUDE	VALVE	8	0
544 CRUDE	PRESSURE RELIEF DEVICE	0	0
544 CRUDE	PUMP	0	0
544 CRUDE	VALVE	16	10
544 VACUUM	PRESSURE RELIEF DEVICE	1	1
544 VACUUM	PUMP	0	0
544 VACUUM	VALVE	2	0
ALKY	CONNECTOR	0	0
ALKY	PRESSURE RELIEF DEVICE	0	1
ALKY	PUMP	0	0
ALKY	VALVE	85	16
AMINE	PRESSURE RELIEF DEVICE	0	0
AMINE	PUMP	1	0
AMINE	VALVE	8	0
AWWTP	VALVE	0	0
BLEND	CONNECTOR	0	0
BLEND	PRESSURE RELIEF DEVICE	0	0
BLEND	PUMP	0	0
BLEND	VALVE	0	0
BOILER	PRESSURE RELIEF DEVICE	0	0
BOILER	VALVE	0	0
BUTANE	PRESSURE RELIEF DEVICE	0	0
BUTANE	VALVE	0	0
CRUDE	CONNECTOR	0	0
CRUDE	PRESSURE RELIEF DEVICE	0	0
CRUDE	PUMP	0	0
CRUDE	VALVE	0	0
DESALT	CONNECTOR	0	0
DESALT	PRESSURE RELIEF DEVICE	0	0
DESALT	PUMP	0	0
DESALT	VALVE	2	2
DIESEL	COMPRESSOR	0	0
DIESEL	CONNECTOR	0	0
DIESEL	PRESSURE RELIEF DEVICE	0	0
DIESEL	PUMP	0	0
DIESEL	VALVE	0	0
FCC	COMPRESSOR	0	0
FCC	CONNECTOR	0	0
FCC	PRESSURE RELIEF DEVICE	10	3
FCC	PUMP	2	0
FCC	VALVE	539	126
FLARE	PUMP	0	0
FLARE	VALVE	0	1

ISOCRK	COMPRESSOR	0	0
ISOCRK	CONNECTOR	1	0
ISOCRK	PRESSURE RELIEF DEVICE	1	0
ISOCRK	PUMP	0	0
ISOCRK	VALVE	8	3
KERO	COMPRESSOR	0	0
KERO	CONNECTOR	0	0
KERO	PRESSURE RELIEF DEVICE	0	0
KERO	PUMP	0	0
KERO	VALVE	0	1
LOWLN	COMPRESSOR	0	0
LOWLN	CONNECTOR	0	0
LOWLN	PRESSURE RELIEF DEVICE	0	0
LOWLN	PUMP	0	0
LOWLN	VALVE	0	0
MARINE	COMPRESSOR	0	0
MARINE	CONNECTOR	0	0
MARINE	PRESSURE RELIEF DEVICE	0	0
MARINE	PUMP	0	0
MARINE	VALVE	0	6
NAPHTH	COMPRESSOR	0	0
NAPHTH	CONNECTOR	0	0
NAPHTH	PRESSURE RELIEF DEVICE	0	0
NAPHTH	PUMP	0	0
NAPHTH	VALVE	2	0
OYF	VALVE	0	0
PLATFO	COMPRESSOR	0	0
PLATFO	CONNECTOR	0	0
PLATFO	PRESSURE RELIEF DEVICE	0	0
PLATFO	PUMP	0	0
PLATFO	VALVE	6	6
PRORCL	CONNECTOR	0	0
PRORCL	PRESSURE RELIEF DEVICE	0	0
PRORCL	PUMP	0	0
PRORCL	VALVE	0	16
PROREC	CONNECTOR	0	0
PROREC	PRESSURE RELIEF DEVICE	0	0
PROREC	VALVE	0	0
PROSTO	CONNECTOR	0	0
PROSTO	PRESSURE RELIEF DEVICE	0	0
PROSTO	PUMP	0	0
PROSTO	VALVE	0	22
REFORM	CONNECTOR	0	0
REFORM	PRESSURE RELIEF DEVICE	0	0
REFORM	PUMP	0	0
REFORM	VALVE	1	0
SOUR	PRESSURE RELIEF DEVICE	0	0
SOUR	PUMP	0	0
SOUR	VALVE	0	0
SOUTH TANK FARM	COMPRESSOR	0	0
SOUTH TANK FARM	CONNECTOR	0	0
SOUTH TANK FARM	PRESSURE RELIEF DEVICE	13	4
SOUTH TANK FARM	PUMP	0	0
SOUTH TANK FARM	VALVE	106	119
SRU	COMPRESSOR	0	0

SRU	PRESSURE RELIEF DEVICE	0	0
SRU	VALVE	0	0
SUNOL	CONNECTOR	0	0
SUNOL	PRESSURE RELIEF DEVICE	0	0
SUNOL	VALVE	0	0
TAIL GAS	PRESSURE RELIEF DEVICE	0	0
TAIL GAS	VALVE	0	0
TF	CONNECTOR	0	0
TF	PRESSURE RELIEF DEVICE	0	0
TF	PUMP	0	0
TF	VALVE	2	7
VACUUM	CONNECTOR	0	0
VACUUM	PRESSURE RELIEF DEVICE	0	0
VACUUM	PUMP	0	0
VACUUM	VALVE	0	0
VGO	COMPRESSOR	0	0
VGO	CONNECTOR	0	0
VGO	PRESSURE RELIEF DEVICE	0	0
VGO	PUMP	0	0
VGO	VALVE	0	1
TOTAL:		814	373





MONROE ENERGY TRAINER REFINERY  
REFMACT (REFMACT/EPAVV RULE) SEMI ANNUAL REPORT  
SUMMARY

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 - JUNE 30, 2016

REFMACT (HAP) UNITS IN BLUE

REGULATION	UNIT	CLASS	MONTH	MONITORED	LEAKED	LATE REPAIR
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REFMACT/EPAVV

543 CRUDE

PUMP	1	4	0	0
PUMP	2	4	0	0
PUMP	3	4	0	0
PUMP	4	4	0	0
PUMP	5	4	0	0
PUMP	6	4	0	0
RELIEF	2	8	0	0
RELIEF	5	8	0	0
RELIEF	6	22	0	0
VALVE	1	6	0	0
VALVE	2	1,071	0	0
VALVE	5	1,079	0	0
VALVE	6	21	0	0
		<u>2,239</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

544 CRUDE

PUMP	1	15	0	0
PUMP	2	15	0	0
PUMP	3	15	0	0

PUMP	4	15	0	0
PUMP	5	15	0	0
PUMP	6	15	0	0
RELIEF	2	8	0	0
RELIEF	5	8	0	0
RELIEF	6	10	0	0
VALVE	1	11	0	0
VALVE	2	1,170	2	0
VALVE	3	13	0	0
VALVE	4	15	0	0
VALVE	5	1,180	0	0
VALVE	6	19	0	0
		<u>2,524</u>	<u>2</u>	<u>0</u>

REFMACT/EPAVV

544 VACUUM

PUMP	1	2	0	0
PUMP	2	2	0	0
PUMP	3	2	0	0
PUMP	4	2	0	0
PUMP	5	2	0	0
PUMP	6	2	0	0
RELIEF	1	1	1	0 DOR
RELIEF	2	7	0	0



RELIEF	3	1	0	0
RELIEF	4	2	0	0
RELIEF	5	7	0	0
RELIEF	6	9	0	0
VALVE	1	1	0	0
VALVE	2	392	0	0
VALVE	5	392	0	0
VALVE	6	5	0	0
		<u>829</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVV

ALKY

PUMP	1	28	0	0
PUMP	2	28	0	0
PUMP	3	28	0	0
PUMP	4	28	0	0
PUMP	5	28	0	0
PUMP	6	28	0	0
RELIEF	2	38	0	0
RELIEF	5	38	0	0
RELIEF	6	9	0	0
VALVE	1	12	0	0
VALVE	2	3,405	5	0
VALVE	3	79	0	0
VALVE	4	5	0	0

	VALVE	5	3,404	2	0
	VALVE	6	25	0	0
			<u>7,183</u>	<u>7</u>	<u>0</u>

REFMACT/EPAVV      AMINE

PUMP	1	1	0	0
PUMP	2	2	0	0
PUMP	3	2	0	0
PUMP	4	2	0	0
PUMP	5	2	0	0
PUMP	6	2	0	0
RELIEF	1	6	0	0
RELIEF	4	6	0	0
VALVE	1	349	0	0
VALVE	2	8	0	0
VALVE	3	8	0	0
VALVE	4	357	0	0

745      0      0

REFMACT/EPAVV      AWWTP

VALVE	1	140	0	0
VALVE	4	140	0	0

280      0      0

REFMACT/EPAVV      BLEND

PUMP	1	16	0	0
PUMP	2	16	0	0

	PUMP	3	16	0	0
	PUMP	4	16	0	0
	PUMP	5	16	0	0
	PUMP	6	16	0	0
	RELIEF	1	16	0	0
	RELIEF	4	16	0	0
	RELIEF	6	18	0	0
	VALVE	1	1,261	0	0
	VALVE	4	1,261	0	0
	VALVE	5	1	0	0
			<u>2,669</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

BOILER

	RELIEF	2	1	0	0
	RELIEF	3	1	0	0
	RELIEF	6	1	0	0
	VALVE	2	78	0	0
	VALVE	3	78	0	0
	VALVE	6	78	0	0
			<u>237</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

BUTANE

	RELIEF	2	7	0	0
	RELIEF	5	7	0	0



RELIEF	6	2	0	0
VALVE	2	298	1	0
VALVE	3	1	0	0
VALVE	4	1	0	0
VALVE	5	298	0	0
		<u>614</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVV

DESALT

PUMP	1	10	0	0
PUMP	2	10	0	0
PUMP	3	10	0	0
PUMP	4	10	0	0
PUMP	5	10	0	0
PUMP	6	10	0	0
RELIEF	1	12	0	0
RELIEF	4	12	0	0
RELIEF	6	9	0	0
VALVE	1	815	0	0
VALVE	2	2	0	0
VALVE	4	811	0	0
VALVE	6	8	0	0
		<u>1,729</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

DIESEL

PUMP	1	11	0	0
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PUMP	2	11	0	0
PUMP	3	11	0	0
PUMP	4	11	0	0
PUMP	5	11	0	0
PUMP	6	11	0	0
RELIEF	1	9	0	0
RELIEF	4	9	0	0
RELIEF	6	7	0	0
VALVE	1	792	1	0
VALVE	2	1	0	0
VALVE	3	1	0	0
VALVE	4	792	0	0
VALVE	6	6	0	0
		<u>1,683</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVV

FCC

PUMP	1	19	0	0
PUMP	2	23	0	0
PUMP	3	23	0	0
PUMP	4	25	0	0
PUMP	5	25	0	0
PUMP	6	25	0	0
RELIEF	2	25	0	0
RELIEF	3	2	0	0



	RELIEF	5	33	0	0
	RELIEF	6	8	0	0
	VALVE	2	1,965	1	0
	VALVE	3	111	0	0
	VALVE	4	434	0	0
	VALVE	5	2,283	0	0
	VALVE	6	13	0	0
			<u>5,014</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVV

FLARE

PUMP	1	3	0	0
PUMP	2	3	0	0
PUMP	3	3	0	0
PUMP	4	3	0	0
PUMP	5	3	0	0
PUMP	6	3	0	0
VALVE	1	3	0	0
VALVE	3	221	0	0
VALVE	6	221	0	0
		<u>463</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

ISOCRK

COMPR	1	1	0	0
COMPR	2	1	0	0
COMPR	3	1	0	0

COMPR	4	1	0	0
COMPR	5	1	0	0
COMPR	6	1	0	0
CONECT	1	1	0	0
CONECT	3	1	1	0
PUMP	1	18	0	0
PUMP	2	18	0	0
PUMP	3	18	0	0
PUMP	4	18	0	0
PUMP	5	18	0	0
PUMP	6	18	0	0
RELIEF	1	57	1	0 DOR
RELIEF	2	2	0	0
RELIEF	3	1	0	0
RELIEF	4	56	0	0
RELIEF	6	4	0	0
VALVE	1	3,112	2	0
VALVE	2	13	0	0
VALVE	3	17	0	0
VALVE	4	3,119	1	0
VALVE	5	6	0	0
VALVE	6	10	0	0

REFMACT/EPAVV

KERO

PUMP	1	9	0	0
PUMP	2	9	0	0
PUMP	3	9	0	0
PUMP	4	9	0	0
PUMP	5	9	0	0
PUMP	6	9	0	0
RELIEF	1	31	0	0
RELIEF	4	30	0	0
RELIEF	6	8	0	0
VALVE	1	1,520	0	0
VALVE	4	1,520	0	0
VALVE	5	1	0	0
VALVE	6	22	0	0

3,186

0

0

REFMACT/EPAVV

LOWLN

PUMP	1	6	0	0
PUMP	2	6	0	0
PUMP	3	6	0	0
PUMP	4	6	0	0
PUMP	5	6	0	0
PUMP	6	6	0	0
RELIEF	1	6	0	0



RELIEF	4	6	0	0
VALVE	1	577	0	0
VALVE	4	574	0	0
VALVE	6	2	0	0

**1,201**      **0**      **0**

**REFMACT/EPAVV**      **MARINE**

RELIEF	2	8	0	0
RELIEF	5	8	0	0
RELIEF	6	1	0	0
VALVE	2	185	0	0
VALVE	5	179	0	0
VALVE	6	29	0	0
		<b><u>410</u></b>	<b><u>0</u></b>	<b><u>0</u></b>

**REFMACT/EPAVV**      **NAPHTH**

PUMP	1	16	0	0
PUMP	2	16	0	0
PUMP	3	16	0	0
PUMP	4	16	0	0
PUMP	5	16	0	0
PUMP	6	16	0	0
RELIEF	3	13	0	0
RELIEF	6	20	0	0
VALVE	1	2	0	0

	VALVE	2	2	0	0
	VALVE	3	1,506	3	0
	VALVE	4	4	0	0
	VALVE	5	4	0	0
	VALVE	6	1,517	0	0
			<u>3,164</u>	<u>3</u>	<u>0</u>
<u>REFMACT/EPAVV</u>	<u>PLATFO</u>				
	COMPR	1	1	0	0
	COMPR	2	1	0	0
	COMPR	3	1	0	0
	COMPR	4	1	0	0
	COMPR	5	1	0	0
	COMPR	6	1	0	0
	CONECT	1	1	0	0
	CONECT	2	1	0	0
	CONECT	3	1	0	0
	PUMP	1	10	0	0
	PUMP	2	10	0	0
	PUMP	3	10	0	0
	PUMP	4	10	0	0
	PUMP	5	10	0	0
	PUMP	6	10	0	0
	RELIEF	3	30	0	0
	RELIEF	6	30	0	0



VALVE	1	5	0	0
VALVE	2	5	0	0
VALVE	3	2,196	0	0
VALVE	4	11	0	0
VALVE	5	10	0	0
VALVE	6	2,197	0	0
		<u>4,553</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

PRORCL

PUMP	1	1	0	0
PUMP	2	1	0	0
PUMP	3	1	0	0
PUMP	4	1	0	0
PUMP	5	1	0	0
PUMP	6	1	0	0
RELIEF	3	3	0	0
RELIEF	6	3	0	0
VALVE	1	1	0	0
VALVE	2	1	0	0
VALVE	3	313	2	0
VALVE	4	2	0	0
VALVE	5	2	0	0
VALVE	6	313	0	0
		<u>644</u>	<u>2</u>	<u>0</u>

REFMACT/EPAVV

PROREC

RELIEF	2	12	0	0
RELIEF	5	12	0	0
RELIEF	6	1	0	0
VALVE	2	644	1	0
VALVE	3	1	0	0
VALVE	4	1	0	0
VALVE	5	644	4	0
VALVE	6	4	0	0
		<u>1,319</u>	<u>5</u>	<u>0</u>

REFMACT/EPAVV

PROSTO

PUMP	1	6	0	0
PUMP	2	6	0	0
PUMP	3	6	0	0
PUMP	4	6	0	0
PUMP	5	6	0	0
PUMP	6	6	0	0
RELIEF	1	21	0	0
RELIEF	4	20	0	0
RELIEF	6	1	0	0
VALVE	1	540	1	0
VALVE	2	2	0	0

VALVE	3	1	0	0
VALVE	4	539	0	0
		<u>1,160</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVV

REFORM

PUMP	1	8	0	0
PUMP	2	8	0	0
PUMP	3	8	0	0
PUMP	4	8	0	0
PUMP	5	8	0	0
PUMP	6	8	0	0
RELIEF	2	11	0	0
RELIEF	5	11	0	0
RELIEF	6	3	0	0
VALVE	2	825	0	0
VALVE	5	825	0	0
VALVE	6	6	0	0
		<u>1,729</u>	<u>0</u>	<u>0</u>

REFMACT/EPAVV

SOUR

RELIEF	2	2	0	0
RELIEF	5	2	0	0
VALVE	2	53	0	0
VALVE	5	53	0	0
		<u>110</u>	<u>0</u>	<u>0</u>



REFMACT/EPAVVSOUTH TANK FARM

PUMP	1	28	0	0
PUMP	2	29	0	0
PUMP	3	29	0	0
PUMP	4	29	0	0
PUMP	5	29	0	0
PUMP	6	29	0	0
RELIEF	3	100	0	0
RELIEF	5	1	0	0
RELIEF	6	36	0	0
VALVE	1	3	0	0
VALVE	2	5	0	0
VALVE	3	2,635	0	0
VALVE	4	26	0	0
VALVE	5	2	0	0
VALVE	6	2,574	1	0
		<u>5,555</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVVSRU

RELIEF	1	3	0	0
RELIEF	4	3	0	0
VALVE	1	78	0	0
VALVE	2	2	0	0
VALVE	4	78	0	0

164                      0                      0

REFMACT/EPAVV                      TAIL GAS

RELIEF                      1                      3                      0                      0

RELIEF                      4                      3                      0                      0

VALVE                      1                      159                      0                      0

VALVE                      4                      159                      0                      0

324                      0                      0

REFMACT/EPAVV                      TF

PUMP                      1                      10                      0                      0

PUMP                      2                      10                      0                      0

PUMP                      3                      10                      0                      0

PUMP                      4                      10                      0                      0

PUMP                      5                      10                      0                      0

PUMP                      6                      10                      0                      0

RELIEF                      1                      1                      0                      0

RELIEF                      4                      1                      0                      0

VALVE                      3                      889                      0                      0

VALVE                      6                      872                      0                      0

1,823                      0                      0

REFMACT/EPAVV                      VACUUM

PUMP                      1                      2                      0                      0

PUMP                      2                      2                      0                      0

PUMP                      3                      2                      0                      0



PUMP	4	2	0	0
PUMP	5	2	0	0
PUMP	6	2	0	0
RELIEF	1	3	0	0
RELIEF	4	3	0	0
VALVE	1	494	1	0
VALVE	2	2	0	0
VALVE	3	1	0	0
VALVE	4	494	0	0
VALVE	6	1	0	0
		<u>1,010</u>	<u>1</u>	<u>0</u>

REFMACT/EPAVV

VGO

CONECT	1	3	0	0
PUMP	1	1	0	0
PUMP	2	1	0	0
PUMP	3	1	0	0
PUMP	4	1	0	0
PUMP	5	1	0	0
PUMP	6	1	0	0
RELIEF	1	11	0	0
RELIEF	4	11	0	0
VALVE	1	620	0	0

	VALVE	2	4	0	0
	VALVE	3	4	0	0
	VALVE	4	618	1	0
	VALVE	5	2	0	0
	VALVE	6	3	0	0
			<u>1,282</u>	<u>1</u>	<u>0</u>
<u>REFMACT/EPAVV</u>	<u>WGS</u>				
	PUMP	1	4	0	0
	VALVE	1	1	0	0
			<u>5</u>	<u>0</u>	<u>0</u>

TOTAL:	49,443	23	0
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MONROE ENERGY TRAINER REFINERY  
REFMACT (EPAVV RULE) SEMI ANNUAL REPORT

ON DELAY OF REPAIR

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

REFMACT (HAP) UNITS IN BLUE

TAG	UNIT	CLASS	ON DELAY
8029	544 VACUUM	RELIEF	1/14/2016
16169	ISOCRK	RELIEF	1/26/2016
TOTAL:			2

MONROE ENERGY TRAINER REFINERY  
 REFMACT (EPAVV RULE) SEMI ANNUAL REPORT  
 OFF DELAY OF REPAIR  
 REPORT DATE: JULY 7, 2016  
 REPORT PERIOD: JANUARY 1, 2016 THRU JUNE 30, 2016

REFMACT (HAP) UNITS IN BLUE

TAG	AREA	COMPONENT	OFF DELAY
8029	544 VACUUM TOWER	RELIEF	4/26/2016
16169	ISOCRK	RELIEF	3/2/2016
11066A	PLATFORMER	CONNECTOR	3/2/2016
TOTAL:			3



## MONROE ENERGY TRAINER REFINERY

## REFMACT/VORMACT UNITS LDAR SEMI ANNUAL REPORT

ADDED AND DELETED

REFMACT UNITS IN BLUE

REPORT DATE: JULY 7, 2016

REPORT PERIOD: JANUARY 1, 2016 THROUGH JUNE 30, 2016

UNIT	CLASS	ADDED	DELETE
543 CRUDE	PRESSURE RELIEF DEVICE	0	0
543 CRUDE	PUMP	0	0
543 CRUDE	VALVE	8	0
544 CRUDE	PRESSURE RELIEF DEVICE	0	0
544 CRUDE	PUMP	0	0
544 CRUDE	VALVE	16	10
544 VACUUM	PRESSURE RELIEF DEVICE	1	1
544 VACUUM	PUMP	0	0
544 VACUUM	VALVE	2	0
ALKY	CONNECTOR	0	0
ALKY	PRESSURE RELIEF DEVICE	0	1
ALKY	PUMP	0	0
ALKY	VALVE	85	16
AMINE	PRESSURE RELIEF DEVICE	0	0
AMINE	PUMP	1	0
AMINE	VALVE	8	0
AWWTP	VALVE	0	0
BLEND	CONNECTOR	0	0
BLEND	PRESSURE RELIEF DEVICE	0	0
BLEND	PUMP	0	0
BLEND	VALVE	0	0
BOILER	PRESSURE RELIEF DEVICE	0	0
BOILER	VALVE	0	0
BUTANE	PRESSURE RELIEF DEVICE	0	0
BUTANE	VALVE	0	0
CRUDE	CONNECTOR	0	0
CRUDE	PRESSURE RELIEF DEVICE	0	0
CRUDE	PUMP	0	0
CRUDE	VALVE	0	0
DESALT	CONNECTOR	0	0
DESALT	PRESSURE RELIEF DEVICE	0	0
DESALT	PUMP	0	0
DESALT	VALVE	2	2
DIESEL	COMPRESSOR	0	0
DIESEL	CONNECTOR	0	0
DIESEL	PRESSURE RELIEF DEVICE	0	0
DIESEL	PUMP	0	0
DIESEL	VALVE	0	0
FCC	COMPRESSOR	0	0
FCC	CONNECTOR	0	0
FCC	PRESSURE RELIEF DEVICE	10	3
FCC	PUMP	2	0
FCC	VALVE	539	126
FLARE	PUMP	0	0
FLARE	VALVE	0	1

ISOCRK	COMPRESSOR	0	0
ISOCRK	CONNECTOR	1	0
ISOCRK	PRESSURE RELIEF DEVICE	1	0
ISOCRK	PUMP	0	0
ISOCRK	VALVE	8	3
KERO	COMPRESSOR	0	0
KERO	CONNECTOR	0	0
KERO	PRESSURE RELIEF DEVICE	0	0
KERO	PUMP	0	0
KERO	VALVE	0	1
LOWLN	COMPRESSOR	0	0
LOWLN	CONNECTOR	0	0
LOWLN	PRESSURE RELIEF DEVICE	0	0
LOWLN	PUMP	0	0
LOWLN	VALVE	0	0
MARINE	COMPRESSOR	0	0
MARINE	CONNECTOR	0	0
MARINE	PRESSURE RELIEF DEVICE	0	0
MARINE	PUMP	0	0
MARINE	VALVE	0	6
NAPHTH	COMPRESSOR	0	0
NAPHTH	CONNECTOR	0	0
NAPHTH	PRESSURE RELIEF DEVICE	0	0
NAPHTH	PUMP	0	0
NAPHTH	VALVE	2	0
OYF	VALVE	0	0
PLATFO	COMPRESSOR	0	0
PLATFO	CONNECTOR	0	0
PLATFO	PRESSURE RELIEF DEVICE	0	0
PLATFO	PUMP	0	0
PLATFO	VALVE	6	6
PRORCL	CONNECTOR	0	0
PRORCL	PRESSURE RELIEF DEVICE	0	0
PRORCL	PUMP	0	0
PRORCL	VALVE	0	16
PROREC	CONNECTOR	0	0
PROREC	PRESSURE RELIEF DEVICE	0	0
PROREC	VALVE	0	0
PROSTO	CONNECTOR	0	0
PROSTO	PRESSURE RELIEF DEVICE	0	0
PROSTO	PUMP	0	0
PROSTO	VALVE	0	22
REFORM	CONNECTOR	0	0
REFORM	PRESSURE RELIEF DEVICE	0	0
REFORM	PUMP	0	0
REFORM	VALVE	1	0
SOUR	PRESSURE RELIEF DEVICE	0	0
SOUR	PUMP	0	0
SOUR	VALVE	0	0
SOUTH TANK FARM	COMPRESSOR	0	0
SOUTH TANK FARM	CONNECTOR	0	0
SOUTH TANK FARM	PRESSURE RELIEF DEVICE	13	4
SOUTH TANK FARM	PUMP	0	0
SOUTH TANK FARM	VALVE	106	119
SRU	COMPRESSOR	0	0



SRU	PRESSURE RELIEF DEVICE	0	0
SRU	VALVE	0	0
SUNOL	CONNECTOR	0	0
SUNOL	PRESSURE RELIEF DEVICE	0	0
SUNOL	VALVE	0	0
TAIL GAS	PRESSURE RELIEF DEVICE	0	0
TAIL GAS	VALVE	0	0
TF	CONNECTOR	0	0
TF	PRESSURE RELIEF DEVICE	0	0
TF	PUMP	0	0
TF	VALVE	2	7
VACUUM	CONNECTOR	0	0
VACUUM	PRESSURE RELIEF DEVICE	0	0
VACUUM	PUMP	0	0
VACUUM	VALVE	0	0
VGO	COMPRESSOR	0	0
VGO	CONNECTOR	0	0
VGO	PRESSURE RELIEF DEVICE	0	0
VGO	PUMP	0	0
VGO	VALVE	0	1
TOTAL:		814	373